EASTERN EQUINE ENCEPHALITIS (EEE)

CLINICAL FEATURES
- Symptoms range from mild flu-like illness to frank encephalitis, coma and death

ETIOLOGIC AGENT
- Eastern equine encephalitis virus, member of the family *Togaviridae*, genus *Alphavirus*.
- Closely related to Western and Venezuelan equine encephalitis viruses

INCIDENCE
- EEE is a rare illness in humans, and only a few cases are reported in the US each year. There have been 153 confirmed cases in the U.S. since 1964

SEQUELAE
- Mild to severe neurologic deficits in survivors

COSTS
- Total case costs range from $21,000 for transiently infected individuals to $3 million for severely infected individuals
- Insecticide applications can cost as much as $1.4 million depending on the size of area treated

TRANSMISSION
- EEE Virus is transmitted to humans by the bite of an infected mosquito(Mosquito-borne)

RISK GROUPS
- Residents of endemic areas and visitors; most cases occur in the Atlantic and Gulf Coast states.
- Persons with outdoor work and recreational activities

SURVEILLANCE
- National Notifiable Diseases Surveillance System

TRENDS
- Risk exposure increases as population expands into endemic areas

CHALLENGES
- No licensed vaccine for human use
- No effective therapeutic drug
- Unknown overwintering cycle
- Control measures expensive
- Limited financial support of surveillance and prevention

OPPORTUNITIES
- Mosquito control
- Education of health-care workers and the public
- Integrated State and Federal prevention efforts

- Vaccine development
- Therapeutic development

PREVENTION

•Use insect repellent
•Wear protective clothing
•Install and repair screen
•Get rid of mosquito breeding sites i.e. standing water